

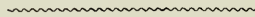
but also,—in one genus especially,—quite as well developed as in the frugivorous.

In every species of the genus *Taphozous*, Geoff., examined by me, I have found well developed post-orbital processes. In a skull of *T. melanopogon*, Tem., before me, a long and slender post-orbital process of the frontal extends more than half the distance between the frontal bone and the zygomatic arch, forming nearly one-third of the entire circumference of the orbit.

Post-orbital processes of the frontals are also found in the genera *Megaderma* and *Nycteris*. In the latter genus the post-orbital process may be described as a triangular expanded lamina of bone, of which the base extends from the sagittal crest to the maxilla; in the former it is short and blunt, and its base is perforated, as in *Pteropus*, by a supra-orbital foramen.

In *Vesperus pachypus*, Tem., a small post-orbital process exists.

The above examples show that in many species of insectivorous bats post-orbital processes of the frontals are present. In no species, however, have I succeeded in detecting corresponding zygomatic processes, as in the genus *Pteropus*.



#### BRIEF DESCRIPTIONS OF FIVE NEW SPECIES OF RHINOLOPHINE BATS,—

by G. E. DOBSON, B. A., M. B.

The following short descriptions of new species of Rhinolophine bats in the collection of *Chiroptera* in the Indian Museum are intended as prefatory to more detailed descriptions, to be published hereafter with illustrations.

##### 1. RHINOLOPHUS YUNANENSIS, n. sp.

Ears large; antitragus separated from the outer margin by a deep, angular incision. Nose-leaf large; the horizontal horse-shoe shaped portion concealing the upper lip as in *Rh. luctus*. The upper edge of the central erect, anteriorly flattened, nasal crest meets, at the same level, the upper edge of the posterior vertical membrane. Lower lip divided by a single vertical incision. Wings from the ankles; tail contained within the interfemoral membrane, with the exception of the extreme tip; interfemoral membrane cut square behind, or slightly concave.

Length, head and body, 2·7 inches; tail 0·9; ear (anteriorly) 1·0; nose-leaf 0·7; forearm 2·2; tibia 1·1.

*Hab.*—Hotha, Yunan; collected by Dr. Anderson during the Yunan expedition.\*

\* Other new species of bats obtained by Dr. Anderson during the Yunan Expedition have been shortly described by the writer in the Proc. As. Soc. Beng. for Sept. 1871.

## 2. RHINOLOPHUS GAROENSIS, n. sp.

Ears acutely pointed with a well developed antitragus. Upper edge of the posterior vertical connecting process of the central nose-leaf forming an acutely pointed elevation; posterior nose-leaf terminating behind in a broad, triangular, pointed process.

Wings from the ankles, interfemoral membrane cut square behind; tip of tail free.

This species is closely allied to *Rh. cornutus*, Tem., from Japan, from which it differs mainly in size.

Length, head and body 1·5 inches; tail 0·7; ear (anteriorly) 0·5; forearm, 1·3; 2nd finger 2·0; 4th finger 1·7; tibia 0·6.

*Hab.*—Garo Hills, Assam. Collected by Major H. H. Godwin-Austen.

## 3. RHINOLOPHUS ANDAMANENSIS, n. sp.

This species resembles *Rh. affinis*, and may be referred to the same section of the genus. The anterior horizontal horse-shoe shaped portion of the nose-leaf is very broad and flat, concealing the muzzle when viewed from above, as in *Rh. Yunanensis*. The posterior triangular nose-leaf is long, and produced backwards between the ears.

Wings from the ankles, or from the tibia slightly higher up. Interfemoral membrane cut square or slightly concave behind; tip of tail projecting.

Length, head and body, 2·5 inches; tail 0·9; ear (anteriorly) 0·85; ear (posteriorly) 0·75; forearm 2·05; thumb 0·45; tibia 1·0.

*Hab.*—Andaman Islands. Collected by Mr. Homfray, Assistant Superintendent, Port Blair, to whom the Indian Museum is indebted for many specimens illustrative of the zoology of the islands.

## 4. RHINOLOPHUS PETERSII, n. sp.

Ears acutely pointed, with an emargination immediately beneath the tip; antitragus large, separated from the outer margin by a deep angular incision.

Nose-leaf about same size as in *Rh. affinis*. The upper border of the posterior connecting portion of the central nasal crest is produced into a subacute point; the sides of the terminal part of the posterior nose-leaf are deeply emarginate, so that it ends in a small narrow projection.

Wings from the ankles; interfemoral membrane slightly triangular behind; tip of tail free, projecting about  $\frac{1}{8}$  inch beyond the membrane.

This species resembles *Rh. acuminatus*, Peters, from Java, but differs from it, as Dr. Peters informs me, in having the terminal portion of the tail free, and in other respects, as in measurement, slightly, and in the form of the ears, &c.

Length (of a male) head and body 2·5 inches, tail 1·0 ; ear (anteriorly) 0·75 ; breadth of antitragus 0·3 ; length of forearm 2·0 ; thumb 0·4 ; tibia 0·9 ; foot and claws 0·5.

*Hab.*—Sent from some part of India, precise locality not known.

5. *PHYLLORHINA MASONI*, n. sp.

This species belongs to the same section of the genus as *Ph. Nicobarensis*, Dobson. As in that species, the concave front surface of the base of the transverse nose-leaf is divided into *two cells only* by a single central longitudinal fold ; the upper margin or crest of the transverse nose-leaf, and the thickened cordiform ridge behind the nasal orifices develop acute projections in the centre of their front surfaces as in *Ph. diadema*, Geoff. The horse-shoe shaped membrane is simple, with three secondary vertical processes of membrane on each side.

From the under surface of the symphysis of the mandible a small conical bony process projects downwards, about equal to the lower canine tooth in vertical extent.

Wings from the ankles ; tip of tail free ; interfemoral membrane triangular behind.

Length, head and body, 3·65 inches ; tail 1·65 ; ear (anteriorly) 1·1 ; forearm 3·35 ; 2nd finger 5·0 ; 4th finger 3·9 ; thumb 0·6 ; tibia 1·35.

*Hab.*—Moulmain, Barma.

This fine species was first submitted to me for examination by Mr. Wood-Mason, with the remark that it was most probably new ; I have, therefore, much pleasure in connecting his name with it.